REMARKS

The Applicants would like to thank the Examiner for his courtesy in the telephone interview with the Applicants' attorney, Kevin E. McDermott, on February 7, 2007. Applicants' attorney asked the Examiner to clarify the rejection of claim 6 as indefinite under 35 U.S.C. 112. The Examiner stated that the phrase "and relative to the laser beam" was confusing since the "transverse laser radiation intensity distribution" is already described as being "with respect to the direction of advance movement of the foil." Accordingly, Applicants' attorney asked if amending the claim to delete the phrase "and relative to the laser beam" would overcome the rejection. The Examiner said that such an amendment may overcome the objection but he could not provide a more definite answer until after he reviewed Applicants' response to the Office Action. No agreement was reached and no other issues were discussed.

The Applicants have amended claims 1 and 9 to incorporate the limitations of claim 6 except for the phrase "and relative to the laser beam." In addition, Applicants have cancelled claim 6.

The Applicants have carefully considered the final Office Action mailed on January 7, 2008 and respond to the issues raised therein as follows:

Claim Rejections -- 35 USC § 112

Claim 6 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite based on a finding that the phrase "has a transverse laser radiation intensity distribution with respect to the direction of advance movement" is not clear. Applicants have cancelled claim 6

and added the limitations of claim 6 to amended claim 1 except for the phrase "and relative to the laser beam."

Claim Rejections -- 35 USC § 103

Claims 1-14 have been rejected under 35 U.S.C. 103(c) as unpatentable over Applicants' admitted prior art in view of Japanese Patent No. JP362159344A ("the Japanese reference"). The Examiner states at page 3 of the Office Action that the Japanese patent describes "a laser and blade apparatus which is used for laser 17 removal of a thin film prior to cutting the base film with blades" and that it would have been obvious to use this method to cut a foil.

Figures 3 and 4 of the present application each show a laser beam intensity distribution of a laser beam seen in cross section and the removal track produced with such a profile in a decorative layer. The upper part of Fig. 3 shows a "rectangular" or "top hat" profile and Fig. 4 shows a Gaussian intensity profile.

Fig. 4 shows the cross section of a laser beam, wherein the light intensity in the center of the laser beam is high but decreases in all directions towards the circumference of the laser beam following a Gaussian function. Using a laser beam with the intensity profile shown in Fig. 4 to cut a decorative layer (5) with more than one layer of different material or one thick layer does not produce a clean cut. The laser beam with the Gaussian intensity profile produces a cut edge that is not made perpendicular to the plane of the carrier film (4) but instead, the cut edge has an angled or curved slope. Accordingly, the width of the cut is narrower at the layer(s) adjacent to the carrier film compared to the width of the cut of the layer(s) near the surface of the film. This

is illustrated in the bottom film structure in Fig.2, wherein the width of the cut is narrower at the layers (6, 7) adjacent to the carrier film (4) compared to the width of the cut at the layer (9) near the surface. When viewed from a point perpendicular to the plane of the carrier layer (4), the upper layer (9) does not cover the subjacent layers 8, 7, 6 in the region of the sloped cut edge. Therefore, corrosion, delamination and chipping of the exposed layers 8, 7, 6 occur, which affects the optical appearance of the edges of the decorative layer (5) in an objectionable and undesirable manner. For example, if one thick opaque layer is cut through, the edge of the layer exhibits decreased opacity.

Fig. 3 shows the cross section of a laser beam, wherein the light intensity from the center to the circumference of the laser beam is at a high, consistent level, as claimed in amended claim 1. Using a laser beam with a "rectangular" or "top hat" intensity profile as shown in Fig. 3 provides a cut edge that is substantially perpendicular to the plane of the carrier film (4). This is particularly advantageous when the film includes a decorative layer (5) comprising more than one layer of different material or when the film has one thick layer that has to be cut. The width of the cut is substantially the same from the carrier layer (4) to the surface layer. Moreover, the consistent width of the laser cut provides more space for the subsequent cutting of the carrier layer (4) using a blade.

A cut made with a laser beam having an intensity distribution as shown in Fig. 3 provides a very clean contour of the decorative layer (5) and produces a cut having a large, consistent cut width for the entire length of the cut.

The Japanese reference does not solve the problem of irregular cut widths found in the prior art methods for cutting decorative films. The Japanese reference does not address this problem because it is not concerned with the problem. The Japanese reference discloses that: "The **end which does not contribute to recording and reproduction** is melted after cutting of a thin magnetic metallic film layer 1 by the laser light which is generated by a laser generator 16 and is irradiated from a gun 17 before a recording medium 11 enters cutting blades 13, 14." (Emphasis added.) Because the Japanese reference is cutting the "end which does not contribute to recording and reproduction," there is no need for a precise cut with the laser beam because it is not necessary to produce attractive edges or to minimize corrosion, delamination and chipping of the exposed edges of the layers.

The Japanese reference neither teaches nor suggests using a laser beam with a "rectangular" or "top hat" laser intensity profile to cut the decorative layer of a foil before the carrier layer is cut with a knife or blade. The method disclosed in the Japanese reference does not solve the problem of inconsistent cut width and uneven edges that the present invention overcomes. Accordingly, amended independent claims 1 and 9 and the claims that depend from them are not obvious and the Applicants respectfully request that the rejection based on the Japanese reference be withdrawn.

Claims 10-12 have been rejected under 35 U.S.C. 103(c) as unpatentable over Applicants' admitted prior art in view of the Japanese reference as applied to claim 9 and further in view of U.S. Patent No. 6,417,483 to Sator ("Sator"). Sator discloses a method for welding

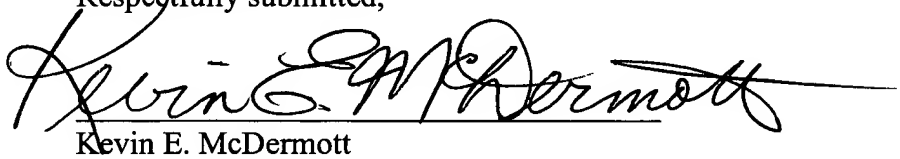
the ends of tubular containers using a laser beam. However, Sator neither teaches nor suggests using a laser beam with a "rectangular" or "top hat" laser intensity profile. Accordingly, Sator does not overcome the deficiencies in the Japanese reference and does not make claims 10-12 obvious.

CONCLUSION

The amendments to the claims and the arguments submitted herein have distinguished the cited prior art. Accordingly, the Applicants respectively request that the Examiner withdraw the rejections based on JP362159344 and Sator and allow the claims.

If the Examiner has any questions relating to this amendment, the Examiner is respectfully invited to contact Applicant's attorney at the telephone number provided below.

Respectfully submitted,



Kevin E. McDermott
Registration No.: 35,946
Attorney for Applicants

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
286425_1